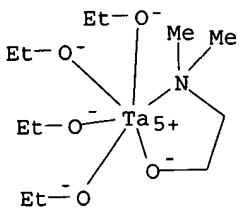
L15 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:293644 HCAPLUS
DN 134:319599
TI Method for fabricating gate oxide layer for a semiconductor device
IN Huang, Kuo-Tai; Huang, Michael W. C.; Yew, Tri-Rung
PA United Microelectronics Corp., Taiwan
SO U.S., 8 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM B32B019-00
NCL 438240000
CC 76-3 (Electric Phenomena)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6221712	B1	20010424	US 1999-385805	19990830
PRAI	US 1999-385805		19990830		

AB A method is provided for fabricating a gate structure. The method involves providing a substrate, followed by forming a nitride region on a surface of the substrate. With a Ta-based org. compd. and a Ti-based org. compd. serving as precursors, an metalorg. CVD (MOCVD) is performed, so that a Ta2-xTixO5 dielec. layer is formed on the substrate. A barrier layer, a conducting layer, and an anti-reflection (AR) layer are then formed in sequence on the Ta2-xTixO5 dielec. layer. Subsequently, the AR layer, the conducting layer, the barrier layer, and the Ta2-xTixO5 dielec. layer are defined to form a gate structure on the substrate of the nitride region. The Ta-based org. compd. in this case may include a Ta-alkoxide compd., whereas the Ti-based org. compd. may include a Ti-alkoxide compd. or a Ti-amide compd.
RL: RCT (Reactant); RACT (Reactant or reagent)
(vapor deposition precursor; method for fabricating gate oxide layer for a semiconductor device)

RN 172901-22-3 HCAPLUS
CN Tantalum, [2-(dimethylamino-.kappa.N)ethanolato-.kappa.O]tetraethoxy-, (OC-6-23)- (9CI) (CA INDEX NAME)



RN 177580-52-8 HCAPLUS
CN Tantalum, tetraethoxy(2,2,6,6-tetramethyl-3,5-heptanedionato-.kappa.O,.kappa.O')-, (OC-6-22)- (9CI) (CA INDEX NAME)